

Claims

WHAT IS CLAIMED IS:

- 1 1. A method for managing and accelerating the delivery of data, comprising:
2 receiving a secure communications request for data associated with a remote
3 site, wherein the request is received from a client; and
4 passing the request to a local managing service for processing, wherein the
5 local managing service is capable of caching the data for servicing the secure
6 communications request of the client and capable of securely interfacing with the
7 remote site.
- 1 2. The method of claim 1 further comprising:
2 determining, by the local managing service, if the secure communications
3 request can be satisfied with cached data; and
4 supplying the data from the cached data to the client with secure
5 communications, if present in cache.
- 1 3. The method of claim 2 further comprising:
2 requesting, by the local managing service, the data from the remote site if
3 the data is not in the cache;
4 receiving the data from the remote site; and
5 supplying the data to the client with secure communications.
- 1 4. The method of claim 3 further comprising, housing the data in the cache for
2 subsequent requests made by the client or other clients for the data, if the data is
3 permitted to be cached.
- 1 5. The method of claim 1 further comprising, maintaining, by the local
2 managing service, a certificate associated with communications from the remote
3 site.

1 6. The method of claim 1 further comprising:
2 transmitting, by the local managing service, to the remote site a first
3 certificate associated with the identity of the local managing service;
4 receiving, from the remote site, at the local managing service a second
5 certificate associated with the identity of the remote site; and
6 communicating between the remote site and the local managing service with
7 Secure Sockets Layer (SSL) communications using the first and second certificates.

1 7. The method of claim 1 further comprising, processing the method as at least
2 one of a forward proxy and a transparent proxy.

1 8. A method of managing and accelerating delivery of data, comprising:
2 processing a local service of a proxy for communicating securely with a
3 client and for acting on behalf of the client during interactions between the client
4 and a remote site;
5 managing authority from the remote site at the local service, wherein
6 authority is managed by accessing a certificate of the remote site at the local service;
7 and
8 caching, within the local service, data received from the remote site, and
9 wherein portions of the data are sent to the client in order to service data requests
10 made from the client to the remote site.

1 9. The method of claim 8 wherein processing further includes establishing
2 communications between the client and the local service using at least one of Hyper
3 Text Transfer Protocol over Secure Sockets Layer (HTTPS), Secure Sockets
4 Layer(SSL), and Transport Layer Security (TLS).

1 10. The method of claim 8 further comprising communicating securely between
2 the local service and the remote site using a secure communications channel.

- 1 11. The method of claim 8 further comprising:
2 initially transmitting a local service certificate to the remote site; and
3 subsequently communicating securely between the local service and the
4 remote site using the local service certificate and the certificate of the remote site.
- 1 12. The method of claim 8 further comprising, establishing the proxy as at least
2 one of a transparent proxy and a forward proxy.
- 1 13. The method of claim 8 further comprising:
2 inspecting at the proxy a secure request made from the client for the remote
3 site; and
4 transferring the secure request to the local service for processing.
- 1 14. The method of claim 8 wherein caching further includes housing the data in
2 the decrypted format within cache of the local service.
- 1 15. The method of claim 8 wherein caching further includes sending the portions
2 of the data from the cache to the client along with the certificate associated with the
3 remote site.
- 1 16. A data management and acceleration delivery system, comprising:
2 a proxy;
3 a local service accessible to the proxy; and
4 a remote site external to the proxy, wherein the proxy directs secure requests
5 received from a client for the remote site to the local service, the local service
6 communicates securely with the client and interacts securely with the remote site to
7 acquire data on behalf of the client, and wherein portions or all of the acquired data
8 are cached within the local service and used to service requests made by the client.
- 1 17. The data management and acceleration delivery system of claim 16 wherein
2 the local service includes a certificate with an identity of the remote site which is

3 vended to the client.

1 18. The data management and acceleration delivery system of claim 16 wherein
2 the local service and remote site mutually interact securely with one another by
3 exchanging certificates with one another.

1 19. The data management and acceleration delivery system of claim 18 wherein
2 the local service and the remote site sign communications occurring between them.

1 20. The data management and acceleration delivery system of claim 16 wherein
2 the client is a browser application.

1 21. The data management and acceleration delivery system of claim 20 wherein
2 the browser is configured to contact the proxy when making requests directed to the
3 remote site.

1 22. The data management and acceleration delivery system of claim 20 wherein
2 the proxy intercepts requests made from the browser which are directed to the
3 remote site and forwards the requests to the local service for handling the requests.

1 23. A data management and acceleration delivery system, comprising:
2 a proxy; and
3 one or more local services directly accessible to the proxy, wherein the
4 proxy acts as an intermediary between one or more clients and one or more remote
5 sites, the proxy detects attempts made by the clients for establishing secure
6 communications with the remote sites and based on the identities of a particular
7 client and particular remote site identifies a particular local service, the particular
8 local service communicates securely with the particular client and securely
9 communicates with the particular remote site, and wherein the particular local
10 service caches data received from the particular remote site for purposes of
11 servicing requests for portions of that data requested by the particular client.

1 24. The data management and acceleration delivery system of claim 23 wherein
2 each local service is associated with a unique one of the remote sites.

1 25. The data management and acceleration delivery system of claim 23 further
2 comprising switching logic that intercepts requests from the clients which are
3 directed to the remote sites and forwards them to the proxy.

1 26. The data management and acceleration delivery system of claim 23 wherein
2 the clients are configured to contact the proxy when making requests for the remote
3 sites.

1 27. The data management and acceleration delivery system of claim 23 wherein
2 each of the local services includes a certificate associated with a unique one of the
3 remote sites.

1 28. The data management and acceleration delivery system of claim 23 wherein
2 a number of the local services communicates securely with a number of the remote
3 sites by initially exchanging mutual certificates.